



**University of  
Zurich**<sup>UZH</sup>

**Zurich Open Repository and  
Archive**

University of Zurich  
University Library  
Strickhofstrasse 39  
CH-8057 Zurich  
[www.zora.uzh.ch](http://www.zora.uzh.ch)

---

Year: 2019

---

## **Cyclic vomiting syndrome: an important differential diagnosis of cannabinoid hyperemesis syndrome**

Spiller, T R ; Künzler, K ; Caduff, B

DOI: <https://doi.org/10.1136/bmj.l5615>

Posted at the Zurich Open Repository and Archive, University of Zurich

ZORA URL: <https://doi.org/10.5167/uzh-185358>

Journal Article

Published Version

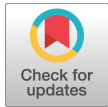


The following work is licensed under a Creative Commons: Attribution 4.0 International (CC BY 4.0) License.

Originally published at:

Spiller, T R; Künzler, K; Caduff, B (2019). Cyclic vomiting syndrome: an important differential diagnosis of cannabinoid hyperemesis syndrome. *BMJ : British medical journal*, 366:l5615.

DOI: <https://doi.org/10.1136/bmj.l5615>



## LETTERS

## CANNABINOID HYPEREMESIS SYNDROME

# Cyclic vomiting syndrome: an important differential diagnosis of cannabinoid hyperemesis syndrome

Tobias R Spiller *resident*<sup>1</sup>, Katarina Künzler *senior physician*<sup>2</sup>, Basil Caduff *head*<sup>2</sup>

<sup>1</sup>Department of Consultation-Liaison Psychiatry and Psychosomatic Medicine, University Hospital Zurich, Rämistrasse 100, 8091 Zurich, Switzerland;

<sup>2</sup>Department of Internal Medicine, Limmattal Hospital, Urdorferstrasse 100, 8952 Schlieren, Switzerland

Chocron and colleagues discuss cannabinoid hyperemesis syndrome.<sup>1</sup> We would like to emphasise the importance of cyclic vomiting syndrome (CVS) as a differential diagnosis, especially in patients presenting to emergency departments. Such patients require different pharmacological treatment from those with cannabinoid hyperemesis syndrome.

Most patients with CVS present at emergency departments with episodes of vomiting, nausea, and abdominal pain.<sup>2</sup> These are the same key symptoms as patients affected by cannabinoid hyperemesis syndrome. Furthermore, up to one third of patients with CVS are also recreational cannabis users.<sup>3</sup> Thus, clinical differentiation can be difficult, but the intensity of cannabis use and the presence of a trigger for an episode of vomiting can be diagnostic hints.

The Rome IV classification of functional gastrointestinal disorders puts CVS and cannabinoid hyperemesis syndrome in the same subgroup (B3): nausea and vomiting disorders.<sup>4</sup> CVS is defined as stereotypical episodes of vomiting with acute onset enduring less than one week. Between episodes, vomiting must be absent. To fulfil the diagnostic criteria of CVS, patients must have had at least two such episodes in the past six months.<sup>3</sup>

The pathophysiology of CVS is complex and not fully understood. It seems to be associated with migraine, including

similar genetic sequence variants in mitochondrial DNA. Most episodes are associated with triggers (such as onset of menses, infections, or psychological stress).<sup>2</sup> There is often a family history of migraine.

Evidence based treatment guidelines for CVS were published recently.<sup>5</sup> Abortive treatment for episodes includes triptans, ondansetron, and in severe cases benzodiazepines. Prophylactic treatment with tricyclic antidepressants or topiramate and coenzyme Q10 is recommended in severe cases.

Competing interests: None declared.

- 1 Chocron Y, Zuber J-P, Vaucher J. Cannabinoid hyperemesis syndrome. *BMJ* 2019;366:l4336. doi: 10.1136/bmj.l4336 31324702
- 2 Pareek N, Fleisher DR, Abell T. Cyclic vomiting syndrome: what a gastroenterologist needs to know. *Am J Gastroenterol* 2007;102:2832-40. 18042112
- 3 Stanghellini V, Chan FKL, Hasler WL, et al. Gastrointestinal disorders. *Gastroenterology* 2016;150:1380-92. doi: 10.1053/j.gastro.2016.02.011 27147122
- 4 Drossman DA. Functional gastrointestinal disorders: history, pathophysiology, clinical features and Rome IV. *Gastroenterology* 2016;150:1262-1279.e2. doi: 10.1053/j.gastro.2016.02.032 27144617
- 5 Venkatesan T, Levinthal DJ, Tarbell SE, et al. Guidelines on management of cyclic vomiting syndrome in adults by the American Neurogastroenterology and Motility Society and the Cyclic Vomiting Syndrome Association. *Neurogastroenterol Motil* 2019;31(Suppl 2):e13604. doi: 10.1111/nmo.13604 31241819

Published by the BMJ Publishing Group Limited. For permission to use (where not already granted under a licence) please go to <http://group.bmj.com/group/rights-licensing/permissions>